II. Amendment

Applicants have amended claims 10, 14, 15 and 16.

A complete listing of the claims of the application is set forth below, with the status of each claim identified in accordance with 37 C.F.R. § 1.121.

Listing of Claims

Claim 1. (original) A method of depolymerizing polysaccharides selected from the group consisting of galactomannans, modified galactomannans and xanthan to a pre-selected molecular weight comprising the step of subjecting the polysaccharides to radiation consisting essentially of electron beams.

Claim 2. (original) The method of claim 1, wherein the galactomannans are depolymerized to a molecular weight of less than about 700,000 Daltons.

Claim 3. (original) The method of claim 1, wherein the galactomannans are depolymerized to a molecular weight of less than about 500,000 Daltons.

Claim 4. (original) The method of claim 1, wherein the galactomannans are depolymerized to a molecular weight of less than about 300,000 Daltons.

Claim 5. (original) The method of claim 3, wherein the galactomannans are depolymerized to a molecular weight of between about 100,000 Daltons and about 250,000 Daltons.

Claim 6. (original) The method of claim 1, wherein the galactomannans are present in a material selected from the group consisting of guar gum, guar splits, hydroxypropyl guar, cationic guar, locust bean guar, tara guar, carboxymethyl guar, carboxymethyl hydroxypropyl guar, cationic hydroxyproxyl guar, hydroxyl alkyl guar and carboxyalkyl guar.

Claim 7. (original) A galactomannan produced according to the method of claim 1.

Claim 8. (original) The galactomannan of claim 5, wherein the galactomannan is selected from the group consisting of guar gum, guar splits, hydroxypropyl guar, cationic guar, locust bean guar, tara gum, carboxymethyl guar, carboxymethylhydroxypropyl guar, cationic hydroxpropyl guar, hydroxyalkyl guar and carboxyalkyl guar.

Claim 9. (canceled)

Claim 10. (currently amended) An oil well fracturing agent, said agent comprising

a) an additive; and

b) a galactomannan which is crosslinkable with said additive and has a molecular weight of between about 100,000 Daltons and about 250,000 Daltons and also has

a polydispersity of below about ~~3.0~~ 2.7 and is at least 90% hydrated within three (3) minutes.

Claim 11. (previously presented) The fracturing agent of claim 10, wherein the crosslinking additive is selected from the group consisting of borate, titanate or zirconate organometallic crosslinking agents.

Claim 12. (previously presented) The fracturing agent of claim 10, wherein the agent further comprises a proppant.

Claim 13. (canceled)

Claim 14. (currently amended) An oil well fracturing agent, said agent comprising:

a) a proppant; and

b) a galactomannan which has a molecular weight of between about 100,000 Daltons and about 250,000 Daltons,

wherein the galactomannan also has a polydispersity of below about ~~3.0~~ 2.7 and is at least 90% hydrated within three (3) minutes.

Claim 15. (currently amended) An oil well fracturing agent, said agent comprising:

a) a proppant;

b) a crosslinking additive; and

c) a galactomannan which is crosslinkable with said additive and has a molecular weight of between about 100,000 Daltons and 250,000 Daltons and a polydispersity of below about ~~3.0~~ 2.7.

Claim 16. (currently amended) An oil well fracturing agent, said agent comprising:

a) a proppant;

b) a crosslinking additive; and

c) a galactomannan which has a molecular weight of between about 100,000 Daltons and about 250,000 Daltons and also has a polydispersity of below about ~~3.0~~ 2.7 and at least 90% changes to a hydrated product within three (3) minutes.